

## STATE OF CONNECTICUT

WATER RESOURCES COMMISSION
STATE OFFICE BUILDING . HARTFORD 15, CONNECTICUT

June 27, 1961

Document No. 31

Mr. J. S. Appleyard, Plant Manager Marlin-Rockwell Corporation Plainville, Connecticut

Dear lir. Appleyard:

We are enclosing a copy of the analyses of samples collected on May 25 and 26, 1961 at your industrial waste treatment plant.

Number 8957 is a sample of the mixed contents of Treatment Tank No. 1 before chemicals were added. Number 8953, a sample of the tank contents after the chemicals were added, should be disregarded as it was unquestionably collected at a point where or at a time when the wastes and chemicals were not thoroughly mixed. Number 8959 is a composite sample of the treated waste as it was discharged from the treatment tank. The analyses indicates a B.O.D. removal of 95% and an oil and grease removal of essentially 100%. We are pleased with these fine results and hope that you are able to maintain this high degree of treatment.

At the time of our visit it was learned that the sludge in the treatment tanks floats instead of settles, as was originally intended. Therefore, it is necessary to observe the discharge regularly in order that valves can be changed at the proper time to direct the sludge to the lagoon. We feel that you should provide for removing the sludge to the lagoon before the treated waste is discharged to the river. This method will allow a more positive means of sludge handling and will not require the presence of a man while the tanks are emptying.

We have received from Electric Boat their proposal for investigating and analyzing surface active materials in ground water. Our Commission, in approving this program, decided that it should be undertaken during the 1961-62 fiscal year. Therefore, we will enter into a contract with the Electric Boat soon after July 1. As soon as the contract has been negotiated we will contact you in order to make the necessary arrangements for collecting well water samples and various samples of your wastes.

Very truly yours,

Jarvin C. Gufefer

Merwin E. Hupfer Principal Engineer

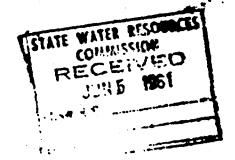
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## MALL LABORATORY OF CHEMISTRY WESLEYAN UNIVERSITY MIDDLETOWN, CONN.

PL GLEET BAPCHE BOOK A. BORTHEL A AOIH BOWELMARE AOIH W. BANE WILLIAM H. BROWN BORKT A. BRINA BONNLD E. BRINA AOIH H. WOODSON

June 2, 1961.

Mr. William S. Wise, Director Water Resources Commission State Office Building Hartford 15, Connecticut



## REPORT ON MARLIN-ROCKWELL, PLAINVILLE, CONNECTICUT

One gallon samples collected by Mr. M. E. Hupfer. Samples 8957 and 8958 were collected on 25 May 1961 and sample 8959 on 26 May 1961.

8957 Batch tank No. 1 (raw waste with floating oil and settleable solids removed). Opaque white.

8958 Batch tank No. 1 mixed contents after chemicals added. To 16,000 gallon tank were added 258 lbs. alum, 80 lbs. calcium chloride, and 40 lbs. bentonite. Contains 220 ml/L top settleable solids. Bottom portion drawn off and analyzed after 2 hour settling. Opaque white. Analyses for this sample should probably be discarded as it is possible that sample was drawn off from batch tank before chemicals were mixed procely.

8959 Effluent from batch tank No. 1. Collected from 10:00-11:30 A.M. as sample was being discharged. Sample had settled for approximately 21 hours after being treated. Water clear.

|      | pН   | ALKALINITY |             |      | SOLIDS |      |      | BOD  | Cu   | Zr.  | Oil and   |
|------|------|------------|-------------|------|--------|------|------|------|------|------|-----------|
|      | _    | OH         | <b>СО</b> 3 | HCO3 | · TS   | FS   | vs   |      |      |      | grease    |
| 8957 | 11.6 | 260        | 760         | 0    | 3358   | 1272 | 2086 | 6600 | 0.9  | 2. 3 | 112(      |
| 8958 | 8. 2 | 0          | 0           | 284  | 1956   | 1634 | 322  | 550  |      |      |           |
| 8959 | 6.5  | 0          | 0           | 150  | 2182   | 2004 | 174  | 120  | <0.5 | /1   | <b>∠1</b> |

Respectfully submitted,

N. W. Masselli

Worksmill

Assistant Supervisor